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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,614	08/03/2001	Feng Lin	MTI-31271	7504

31870 7590 07/23/2003

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EXAMINER

NGUYEN, MINH T

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 07/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/921,614

Applicant(s)

LIN, FENG

Examiner

Minh Nguyen

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13-30 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's amendment filed on 5/2/03 has been received and entered. Claims 1-30 and 34 are pending. In view of the current reconsideration, new grounds of rejections are needed as set forth below. This action is NON-FINAL.

Claim Objections

2. Claims 1, 5, 9 and 14-17 are objected to because of the following informalities:

In claim 1, line 7, "a synchronous mirror delay" should be changed to -- the synchronous mirror delay circuit --, see line 1.

In claim 5, line 6, "a synchronous mirror delay circuit" should be changed to -- the synchronous mirror delay circuit --, see line 1,

line 7, "in" should be deleted.

In claim 9, lines 7-8, "a synchronous mirror delay" should be changed to -- the synchronous mirror delay --.

In claim 14, line 1, the preamble "The circuit of claim 13" is not consistent with the one recited in claim 13, i.e., "A memory device".

In claims 15-17, the same problems exist as discussed in claim 14.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-18 and 23-25 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The decoder 30, multiplexers 28 and 46 are critical or essential to the practice of the invention, but not included in the claims or a circuit without these elements is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

As per claim 13, the specification does not enable a phase detector connected to a SMD circuit as recited, i.e., as shown in Fig. 1 of the present invention, the phase detector 26 is not connected to the SMD 12. Since the invention is about selecting CIN or CIN' to feed into the SMD using phase detector, decoder and multiplexer circuits, these are seen as critical elements, and therefore, they must be included in the claim.

As per claims 14-17, these claims are rejected for the same reasons as noted in claim 13.

As per claim 18, the claim is rejected for the same reasons noted in claim 13.

As per claims 23-25, these claims are rejected for the same reasons noted in claim 13.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-30 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 13, the recitation that the phase detector is connected to the SMD is misdescriptive because as shown in Fig. 1 of the present invention, the phase detector is *not* connected to the SMD as recited, but rather, it is used for determining whether CIN or CIN' is used as an input to the SMD or bypassed the SMD altogether (page 5, second paragraph of the disclosure).

The claim is further rejected as being incomplete for omitting essential elements and structural relationships between these elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the decoder, multiplexers and their structural relationships to the rest of the circuits.

The recitation "at least one of the conditions reduces a number of effective delay stages in the SMD" on the last line appears misdescriptive because the delay stages in the SMD are physical stages, i.e., it cannot be reduced, the correct recitation may be -- wherein at least one of the conditions, the number of delayed stages for the selected signal to pass through the SMD before outputting from the SMD are reduced --.

As per claims 14-17, these claims are rejected for the same reasons noted in claim 13.

As per claim 18, this claim is rejected for the same reasons noted in claim 13.

As per claim 19, the recitation an output related to a clock input signal on line 4 is misdescriptive because it does not make any sense to recite a node related to a signal. The recitation "at least one of the conditions reduces a number of effective delay stages in the SMD"

Art Unit: 2816

on the last line appears misdecriptive because the delay stages in the SMD are physical stages, i.e., it cannot be reduced, the correct recitation may be wherein at least one of the conditions, the number of delayed stages for the selected signal to pass through the SMD before outputting from the SMD are reduced.

As per claims 20-22, these claims are rejected for the same reasons noted in claim 19.

As per claims 23-25, these claims are rejected for the same reasons noted in claims 13, 16 and 14, respectively.

As per claim 26, the recitation on the last four lines is unclear and is not understood, it appears that the structural relationships between the phase detector, the logic and the phase detection and selection system recited in the claim are incorrect, as shown in Fig. 1, it is the output of the logic circuit (the decoder 30) to determine the CIN or CIN' signal is fed to the SMD. The recitation "wherein a number of effective delay stages is reduced" on the last line appears misdecriptive because the delay stages in the SMD are physical stages, i.e., it cannot be reduced, the correct recitation may be wherein at least one of the conditions, the number of delayed stages for the selected signal to pass through the SMD before outputting from the SMD are reduced.

As per claims 27-30, these claims are rejected for the same reasons noted in claim 19.

As per claim 34, the functional recitation on the last four lines does not have any elements and/or structure to support.

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

6. Claims 1-12 are allowed after the objections noted in section 2 are overcome.

Claims 1-4 are allowed because the prior art of record fails to disclose or suggest a method of selecting CIN or CIN' signal into a SMD circuit to reduced the number of delay stages in the SMD circuit in which the selected signal is required to pass through based on the step of detecting the phase of the CIN and CDLY signals as recited in claim 1.

Claims 5-12 are allowed for the same reasons noted in claim 1.

7. Claims 19-22, 26-30 and 34 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office Action.

Claims 19-22, 26-30 and 34 are allowable for the same reason noted in claim 1.

8. As per claims 13-18 and 23-25, due to the serious indefiniteness problems noted herein above, patentability cannot be determined in this Office Action, patentability of these claims will be considered when they are amended to overcome the indefiniteness problems noted above.

Art Unit: 2816

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is 703-306-9179. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Minh Nguyen
Primary Examiner
Art Unit 2816

MN
July 22, 2003